

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for preparing a template switched product encoded by at least part of one first template and at least part of at least one second template, wherein said product comprises at least one predetermined property, said method comprising the steps of

i) providing a first template molecule and at least one second template molecule; and

ii) providing a nucleic acid polymerase; and

iii) synthesising a plurality of different template switched products by contacting sequentially in any order, or simultaneously, at least part of the first template and at least part of the at least one second template with said polymerase under conditions allowing for template dependent nucleotide polymerisation,

wherein the synthesis of each individual template switched product involves at least one template switch,

and wherein the synthesis of the plurality of different template switched products involves a plurality of template switches,

iv) separating at least one template switched product comprising the at least one predetermined property from said plurality of template switched products; and

v) obtaining a template switched product comprising at least one predetermined property

2. (Original) The method of claim 1, wherein

i) the first template comprises a first activity or encodes a molecule comprising a first activity; and

ii) the second template comprises a second activity or encodes a molecule comprising a second activity; and

iii) the predetermined property of the template switched product is a third activity, either comprised within the template switched product or in a molecule encoded by the template switched product; and

wherein the first and second activities are both different from the third activity.

3. (Cancelled)

4. (Currently Amended) The method of claim 1, wherein the method involves more than 2 two different template switches, such as 3, for example 4, such as 5, for example in the range from 5 to 10, such as from 10 to 20, for example from 20 to 50, such as from 50 to 100, for example from 100 to 200, such as more than 200 different template switches.

5. - 6. (Cancelled)

7. (Currently Amended) The method of any of claims 1 to 6 claim 1, wherein the nucleic acid polymerase comprises a RNase H activity.

8. (Currently Amended) The method of any of claims 1 to 7 claim 1, wherein said method involves providing in a single reaction mixture more than 10 different templates and obtaining more than 100 different template switched products.

9. (Currently Amended) The method of ~~any of claims 1 to 8~~  
claim 1, wherein the polymerase comprises reverse  
transcriptase activity.

10. - 13. (Cancelled)

14. (Original) The method of claim 1, wherein the first  
template and/or the second template are nucleic acid  
molecules.

15. - 21. (Cancelled)

22. (Original) The method of claim 1, wherein the first  
template and/or the second template are RNA molecules.

23. - 25. (Cancelled)

26. (Original) The method of claim 1, wherein the method  
furthermore comprises introducing into said first and/or  
second template one or more template switch signals prior to  
synthesis of the template switched product.

27. (Original) The method of claim 26, wherein the template  
switch signal is a breakage in the template.

28. (Original) The method of claim 26, wherein the template switch signal comprises a predetermined secondary structure.

29. - 32. (Cancelled)

33. (Original) The method of claim 26, wherein the template switch signal comprises a nucleotide analogue.

34. (Original) The method of claim 33, wherein the nucleotide analogue is capable of entering the active site of the polymerase, but not capable of being incorporated into a nucleic acid.

35. (Original) The method of claim 33, wherein the nucleotide analogue is capable of being incorporated to the end of a nucleic acid molecule, and wherein incorporation of the nucleotide analogue inhibits elongation of the nucleic acid.

36. (Original) The method of claim 33, wherein the nucleotide analogue is a phosphorothioate ribonucleotide analogue.

37. (Cancelled)

38. (Original) The method of claim 27, wherein the nick(s) are introduced by limited enzymatic digestion.

39. (Original) The method of claim 38, wherein the enzymatic digestion is performed by a ribonuclease.

40. (Original) The method of claim 27, wherein the breakage is introduced by limited alkaline hydrolysis.

41. (Original) The method of claim 27, wherein the breakage is introduced by limited fragmentation using hydroxyl radicals.

42. (Original) The method of claim 1, wherein the synthesis comprises addition of one or more factors capable of affecting frequency and/or degree and/or accuracy of template switching.

43. (Original) The method of claim 42, wherein said factor is selected from the group consisting of DMS, kethoxal, CMCT, and DEPC.

44. - 52. (Cancelled)

53. (Original) The method of claim 1, wherein one or more templates have been prepared by a method comprising the steps of

- i) Providing a DNA molecule; and
- ii) Providing a mixture of nucleotides and nucleotide analogues, wherein one or more of said nucleotide analogues once incorporated into a nucleic acid do not allow further elongation; and
- iii) Contacting said DNA molecule with said mixture and transcribing and/or replicating said DNA; and
- iv) thereby obtaining one or more different templates.

54. (Original) The method of claim 1, wherein one or more templates have been prepared by a method comprising the steps of

- i) providing a RNA molecule; and
- ii) fragmenting said RNA molecule into RNA fragments; and
- iii) replicating one or more of said RNA fragments; and
- iv) thereby obtaining one or more different templates

55. - 56. (Cancelled)

57. (Original) The method of claim 1, wherein the method comprises amplification of the plurality of template switched products.

58. (Original) The method of claim 57, wherein said amplification involves a PCR reaction.

59. (Original) The method of claim 1, wherein the sequence of steps are repeated at least once.

60. (Original) The method of claim 59, wherein template switched product(s) are used as a first template and/or second template when the method is repeated.

61. (Cancelled)